AMENDMENTS TO THE CLAIMS

1.   (Currently amended) A method for determining a bound around a reference time such that the reference time is determined to have occurred between a first bound limit and a second bound limit, the method comprising the steps of:

transmitting a protected reference time request to a higher level computing device, wherein the higher level computing device is a level closer to a reference time source;

receiving a response from the higher level computing device, the response comprising: a protected reference time source response, the reference time source response comprising the reference time, and a collection of protected reference time requests from each first level computing device that had transmitted the collection of protected reference time requests to the reference time source prior to the reference time,

setting the first bound limit at a transmittal time[[;]] when the protected reference time request was transmitted to the higher level computing device; and

setting the second bound limit at a receipt time[[,]] when the response from the higher level computing device was received.

2.   (Currently amended) A computer-readable medium having computer-executable instructions for determining a bound around a reference time such that the reference time is determined to have occurred between a first bound limit and a second bound limit, the computer-executable instructions performing steps comprising:

transmitting a protected reference time request to a higher level computing device, wherein the higher level computing device is a level closer to a reference time source;

receiving a response from the higher level computing device, the response comprising: a protected reference time source response, the reference time source response comprising the reference time, and a collection of protected reference time requests from each first level computing device that had transmitted the collection of protected reference time requests to the reference time source prior to the reference time,

Application No. 10/694,596   - 3 -   Docket No.: M1103.70114US00
Amendment dated December 5, 2007
Reply to Office Action of September 7, 2007

setting the first bound limit at a transmittal time[[;]] when the protected reference time
request was transmitted to the higher level computing device; and

setting the second bound limit at a receipt time[[,]] when the response from the higher
level computing device was received.

3. (Canceled)

4. (Previously presented) The method of claim 1, wherein the reference time
source is a distributed computing system implementing a Byzantine fault-tolerant consensus
algorithm.

5. (Previously presented) The method of claim 1, wherein the protected
reference time request and the protected reference time source response are protected through
the use of encryption.

6. (Previously presented) The method of claim 1, wherein the protected
reference time request and the protected reference time source response are protected through
the use of a nonce.

7. (Previously presented) The method of claim 1 further comprising the steps of.
receiving a second protected reference time request from a lower level computing device,
wherein the lower level computing device is a level further from the reference time source; and
incorporating the second protected reference time request into the protected reference time
request prior to transmitting the protected reference time request to the higher level computing
device.

8.   (Previously presented) The method of claim 7, wherein the transmitting the protected reference time request is postponed until a predetermined number of protected reference time requests are received from lower level computing devices.

9.   (Previously presented) The method of claim 7, wherein the transmitting the protected reference time request occurred at pre-scheduled times, wherein at least one lower level computing device was informed of the pre-scheduled times if any lower level computing devices are present.

10.   (Previously presented) The method of claim 1, wherein the transmitting the protected reference time request to the higher level computing device comprises transmitting the protected reference time request to at least two higher level computing devices; and wherein further the setting the second bound limit at the receipt time comprises setting the second bound limit at a first receipt time when a first response from the at least two higher level computing devices was received.

11.   (Previously presented) The method of claim 1 further comprising the steps of: determining a rate of change of a system time with respect to the reference time; and setting the first bound limit and the second bound limit to account for the determined rate of change.

12.   (Previously presented) The computer-readable medium of claim 2, wherein the reference time source is a distributed computing system implementing a Byzantine fault-tolerant consensus algorithm.

13.   (Previously presented) The computer-readable medium of claim 2, wherein the protected reference time request and the protected reference time source response are protected through the use of encryption.

14.   (Previously presented) The computer-readable medium of claim 2, wherein the protected reference time request and the protected reference time source response are protected through the use of a nonce.

15.   (Previously presented) The computer-readable medium of claim 2, wherein the response from the higher level computing device is structured in accordance with a Merkle tree algorithm.

16.   (Previously presented) The computer-readable medium of claim 2 having further computer-executable instructions performing steps comprising: receiving a second protected reference time request from a lower level computing device, wherein the lower level computing device is a level further from the reference time source; and incorporating the second protected reference time request into the protected reference time request prior to transmitting the protected reference time request to the higher level computing device.

17.   (Previously presented) The computer-readable medium of claim 16, wherein the transmitting the protected reference time request is postponed until a predetermined number of protected reference time requests are received from lower level computing devices.

18.   (Previously presented) The computer-readable medium of claim 16, wherein the transmitting the protected reference time request occurred at pre-scheduled times, wherein at least one lower level computing device was informed of the pre-scheduled times if any lower level computing devices are present.

19.   (Previously presented) The computer-readable medium of claim 2, wherein the computer-executable instructions performing the transmitting the protected reference time request to the higher level computing device comprise computer-executable instructions for transmitting the protected reference time request to at least two higher level computing devices;

Application No. 10/694,596   - 6 -   Docket No.: M1103.70114US00
Amendment dated December 5, 2007
Reply to Office Action of September 7, 2007

and wherein further the computer-executable instructions performing the setting the second
bound limit at the receipt time comprise computer-executable instructions for setting the second
bound limit at a first receipt time when a first response from the at least two higher level
computing devices was received.

20.   (Previously presented) The computer-readable medium of claim 2 having further
computer-executable instructions performing steps comprising: determining a rate of change of a
system time with respect to the reference time; and setting the first bound limit and the second
bound limit to account for the determined rate of change.

21.   (Canceled)